FoxSec Turnstile Controller

FoxSec® products provide a complete and fully featured hardware/firmware infrastructure for access control and intruder alarm systems.

The FS7311 Turnstile controller connects 2 access control card readers via Wiegand or clock-and-data (magnetic card) interface controlling either one or two doors. The FS8301 features on-board memory, allowing program updates to be downloaded via the RS485 network.

On-board dataline optical isolation and on-board optional 24VDC power.

The FS8311 is compatible with FS9131 and/or FS9000/FS9002 hardware through a RS-485 network. The FS9131 and FS9000/FS9002 in turn, communicates with the system server (FoxSec 1850 and/or FoxSec Net+ via industry standard TCP/IP protocol over 10Mbps Ethernet or the Internet. Internal memory stores up to 1850 users and last 2000 events.

This architecture minimizes the impact on corporate LANs by using only one UDP/IP address for FS9000/FS9002 main panel itself, and by handling low-level transactions on the RS485 network.

The access door controller has developed in a way that it is very durable and has many different and flexible functions.

FS7311 Features


ENTRY / EXIT


Up to 1,850 card users and 2,000 recent events in the controller memory


Optical isolation


2 programmable relay outputs


2 Wiegand inputs


Anti-passback

Metal case 290 x 280 x 80


Power supply unit 12VDC, 2A


Battery control

Features

The unit should be installed indoors, near secured area such as in the IT or telecommunications room, utility closet or server room

All quick-disconnect screw terminal connectors
One RS-485 connection to dataline

2 card reader inputs (26 or 34bit wiegand or clock-and-data)
1 status sensor inputs
1 opening button inputs

2 outputs for turnstile entry /exit inputs
(rated 1.5A @ 12 or 1A@ 24VDC)
2 non-latching output relays for electric loks or other devices
(related 1 x 5A (max500W) and 1 x 1A (max50) @ 48 VDC)
1 electronical fuse protected 1.1A 12VDC
Power output for elevator module or other device

DC Power input
One Tamper inputs

16-bit CPU Microcontroller, 16MHz

1.1A output power (electric lock, external device etc) electronic fuse
1.1A card readers electronic fuse
100mA input protection electronic fuse (each input and separate fuse)
Transformer inside thermal fuse 130° C 2.2A@16VAC

16k Flash memory inside microcontroller
32k EEPROM memory non-volatile
32k FRAM memory non-volatile

Specifications

Dimensions
290W x 280H x 80D mm without lid
(11.4" x 11.2" x 3.15")
Weight
2.70kg (95 oz) without battery
Casing Material
Metal

Power Supply Requirements 1
100-240VAC 50/60Hz power transformer
Main fuse 500mA
Power transformer output supply 16V
Power transformer max output current 2.2A
Controller current 120mA @ 12VDC
PWM (Pulse-with modulation) regulator on-board
Recommended: Supervised switching power supply with battery low contact outputs. Separate supervised DC supply with battery back-up recommended if power supply max consumption exceeds

Operating Environment
Indoors or customer supplied NEMA-4 Enclosure
Temperature
-10° to 40° C (-14° to 104° F)
Humidity
0% to 80% relative, non-condensing
Materials
RoHS compliant 2002/95/EC

Communication Ports
1x RS-485- two wire with optical isolation

Cable Distance
RS-485- 1500m (4900 feet), using shielded twisted pair cable (Cat5e, Cat6e)
Input Circuits- 300m (500 feet), using 4 x 0.22 cable
Output Circuits- 300m (500 feet)
Card reader- 50m (165 feet) 2 x 0.5+4 x 0.22+S
Minimum wire gauge depends on cable length and current requirements

Protection
4000 - VPEAK Isolation
2500- VRMS isolation up to 60sec
Human Body Model Up to 16kV (ESD)
Charged Device Model Up to 1kV (ESD)
Machine Model Up to 200V (ESD)
Thermal Shutdown Protection
Onboard DC-DC converter isolation Up to 3kVDC